**SATELLITE INDUSTRY ASSOCIATION**
**225 Reinekers Lane**
**Suite 600**
**Alexandria, VA 22314**

March 12, 2002

FILED ELECTRONICALLY

William F. Caton, Acting Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Review of Part 15 and Other Parts of the Commission's Rules,
ET Docket 01-278, RM-9375, RM-10051

Dear Mr. Caton:

The Satellite Industry Association ("SIA"),[1] pursuant to Section 1.415 of the Rules of the Federal Communications Commission (the "Commission"),[2] hereby replies to comments filed in response to the Notice of Proposed Rulemaking and Order (the "NPRM") released by the Commission on October 15, 2001, in the above-captioned matter.[3]

## I. Introduction

As the comments in this proceeding unquestionably demonstrate, unlicensed consumer radar detectors are causing harmful interference to authorized

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1 SIA is a national trade association representing the leading U.S. satellite manufacturers, service providers, and launch service companies. SIA serves as an advocate for the U.S. commercial satellite industry on regulatory and policy issues common to its members. With member service companies providing a broad range of manufactured products and services, SIA represents the unified voice of the U.S. commercial satellite industry.

2 47 C.F.R. § 1.415.

3 Review of Part 15 and Other Parts of the Commission's Rules, Notice of Proposed Rulemaking and Order, FCC 01-290, ET Docket No. 01-278, RM-9375, RM-10051 (rel. Oct. 15, 2001) ("NPRM").

satellite operations in the 11.7-12.2 GHz band.[4] This clear violation of the Commission's rules is imposing serious costs on the satellite industry and its customers.[5] It is not only causing persistent interruptions to the nation's Very Small Aperture Terminal ("VSAT") networks, upon which consumers, corporations, and the government rely daily, but in at least one documented case, it even threatened the ability to control an in-orbit satellite.[6] This unlawful interference, caused solely by engineering short-cuts taken by radar detector manufacturers, must be stopped at once.

The radar detector industry admits that its radar detectors emit power levels in excess of Part 15 limits applicable to other kinds of unlicensed devices in the band.[7] Yet, in a desperate attempt to avoid imposition of the strong regulatory action justifiable in this case, the radar detector industry proposes certain "voluntary" steps its members are willing to take. As discussed below, these proposals are wholly insufficient for rectifying the harm to the satellite industry caused by radar detectors.[8]

## II. RADAR Proposal

RADAR states that its member companies will voluntarily commit to limiting emissions from radar detectors to 500 μ V/m measured at 3 meters[9] over the

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4 See Comments of Hughes Network Systems, Inc. ("Hughes Comments"), Comments of Loral SkyNet ("Loral Comments"), Comments of PanAmSat Corporation ("PanAmSat Comments"), Comments of SES Americom, Inc. ("SES Americom Comments"), and Comments of Comsearch ("Comsearch Comments"), ET Docket 01-278, RM-9375, RM-10051, February 12, 2002; see, also, NPRM, ¶ ¶ 10-14.

5 Under Part 15, unlicensed devices are prohibited from causing harmful interference to licensed users of the bands in which they operate. All devices operating under Part 15 are required to cease operation in the event they cause interference into an authorized radio service. 47 C.F.R. § 15.5(b).

6 PanAmSat Comments at 2-3.

7 Comments of RADAR Members, ET Docket 01-278, RM-9375, RM-10051, February 12, 2002 ("RADAR Comments"), at 4; Comments of Escort Incorporated and BEL Incorporated, ET Docket 01-278, RM-9375, RM-10051, February 12, 2002 ("Escort/BEL Comments"), at 2.

8 As indicated in the comments, it is not possible for satellite operators to enforce the existing Part 15 non-interference rules against users of radar detectors. Effective relief can be obtained only by placing appropriate limits on the manufacture and sale of radar detectors. See Hughes Comments at 2, 6; Loral Comments at 2.

9 This is the current limit in the Commission rules for devices other than receivers (and hence radar detectors) in bands above 960 MHz. 47 C.F.R. § 15.101(a).

frequency range 11.7-12.2 GHz, for units imported or domestically manufactured on or after June 1, 2003.[10] RADAR further asserts that, with this pledge, no further regulation is necessary.[11] The RADAR proposal, however, contains several fatal flaws.

First, RADAR proposes its emission limit without any analysis or discussion whatsoever of the ability of this voluntary limit to protect authorized satellite systems operating in the band. As demonstrated in the comments filed in this proceeding, to adequately protect most of the various types of systems deployed by satellite operators and their customers, emissions from radar detectors must not exceed about 30-60 $\mu$ V/m, measured at 3 meters.[12] Even an emission limit at this level would not protect all VSAT terminals.[13] Therefore, the voluntary limit proposed by RADAR will *not* bring radar detectors into compliance with the non-interference requirements of Section 15.5(b) of the Commission's rules.

Second, as RADAR acknowledges, its members do not account for all of the radar detectors sold in the United States. According to its own figure, 15% of radar detectors are sold by non-member companies.[14] Therefore, RADAR's unilateral commitment does not render regulation unnecessary.

Third, the only apparent reason that RADAR would argue against implementation of a limit that it is already pledging to meet is to avoid the application of regulatory compliance and enforcement provisions that go along with such limits. Given the severe and continuing problems that have been encountered with radar detectors, it is vitally important that regulatory measures, such as certification and fine provisions, apply to such devices. The Commission must not allow Part 15 radar detector operations to escape these obligations.

Fourth, the timeline proposed by RADAR for coming into compliance with Part 15 obligations is entirely unreasonable, given the harm demonstrated by the comments in this proceeding. Every day that goes by in which these non-compliant devices are still on the market magnifies the damage done to the satellite industry. As the Commission well knows, even though a well-coordinated recall should significantly reduce the problem, numerous devices already sold will remain in use, by customers who either do not learn of the recall, or do not wish to take the trouble to trade in their device.

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[10] RADAR Comments at 2, 5, 9.

[11] Id.

[12] See Hughes Comments at 7; SES Americom Comments at 7; Comsearch Comments at 3.

[13] See Hughes Comments, Exhibit A, at 11; SES Americom Comments at 7.

[14] RADAR Comments at 1, n.2.

Indeed, it is entirely unclear why RADAR believes it has any right to continue manufacturing and selling devices that do not meet the non-interference requirements of Section 15.5(b) for *any* length of time going forward. In view of the violation of Part 15 obligations demonstrated by the comments in this proceeding, it would be entirely justified for the Commission to issue an immediate injunction against sale of devices that cannot be demonstrated to protect satellite services in the 11.7-12.2 GHz band.[15]

Finally, there is no need for the Commission to issue a further Notice of Proposed Rulemaking before adopting limits, as RADAR claims.[16] As RADAR concedes, a notice of proposed rulemaking need not include specific rule language, but must only provide sufficient detail for parties to comment meaningfully.[17] In the NPRM, the Commission in unambiguous terms proposed to apply emission limits to radar detectors for the protection of VSAT terminals.[18] Part 15 already provides a detailed framework for such limits. All that is left is to determine the emission level necessary to adequately protect authorized satellite systems. It is simply disingenuous for RADAR to complain that "we can neither guess what the Commission might ultimately do, nor comment in sufficient detail on each of the many possibilities."[19]

For these reasons, the Commission should reject each and every aspect of the RADAR proposal.

## III. Escort/BEL Proposal

One radar detector manufacturer, Escort/BEL, wrote separately to argue that even the 500 μ V/m limit would be overly burdensome to the electronics industry, and proposed instead that the radar detector industry vacate the 11.7-12.2 GHz band.[20]

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[15] As noted below, it appears that at least some detectors could be readily adapted to conform with Part 15 obligations, by, for example, adjusting the frequency sweep to avoid the 11.7-12.2 GHz band. See Escort/BEL Comments at 3.

[16] RADAR Comments at 6-7.

[17] Id. at 6.

[18] RADAR selectively cites language in the NPRM in which the Commission seeks comment on "whether there is a need" to require radar detectors to comply with emission limits, RADAR Comments at 6, while ignoring unambiguous language in the first paragraph of the NPRM stating that the Commission "[is] proposing to . . . require that radar detectors be subject to emission limits . . ." NPRM, ¶ 1.

[19] RADAR Comments at 7.

[20] Escort/BEL Comments at 3-4.

Vacating the band may well be the most effective way for radar detectors to meet Part 15 non-interference requirements. However, the only reason Escort/BEL provided for not adopting this limit in the 11.7-12.2 GHz band was to preserve the ability of electronic devices other than radar detectors to continue to have the flexibility to exceed the limit in the band.[21]

The limit Escort/BEL seeks to avoid already far exceeds that necessary to prevent harmful interference to licensed satellite operations. Leaving open the ability of other devices, particularly those likely to be operated in proximity to earth station antennas, to emit at unregulated levels in the band only invites a repeat of the same severe problem VSAT systems are already experiencing with radar detectors. Moreover, even if radar detectors vacate the band, radar detector out-of-band emissions in the band could be high, particularly if these levels are unregulated.

Thus, even if radar detectors vacate the band, this would not eliminate the need for emission limits in the 11.7-12.2 GHz band. Emission limits at a level sufficient to adequately protect these satellite systems are necessary, no matter which individual measures radar detector manufacturers choose to meet them.

## IV. Conclusion

The comments in this proceeding, by SIA and non-SIA members alike, indicate that an emission limit of approximately 30 μ V/m, measured at 3 meters, in the 11.7-12.2 GHz band, is necessary to protect most of the VSAT links authorized in that band.[22] Any more relaxed limit is simply insufficient to meet the Part 15 requirements that unlicensed devices not cause harmful interference to authorized users of the bands in which they operate. Moreover, it is necessary that every reasonable step be taken to prevent both use of existing non-compliant devices and sale of future non-compliant devices.

For the above reasons, SIA proposes that the Commission take the following steps:

- In an expedited manner, adopt an emission limit adequate to protect satellite systems in the 11.7-12.2 GHz band from harmful interference, as well as appropriate equipment authorization procedures and fine provisions to ensure compliance by all marketed devices.

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[21] Escort/BEL Comments at 3.

[22] The 60 μ V/m figure computed by Comsearch is based on more generic link parameters than the calculations of SES Americom and Hughes for their systems. To ensure protection of more sensitive, but still commonly-used, VSAT links, SIA urges the Commission to adopt the more stringent limit of 30 μ V/m.

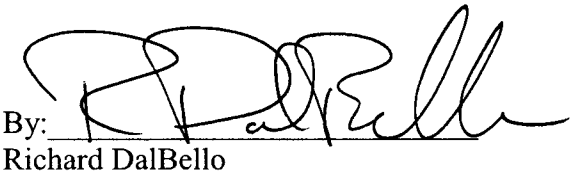
- In the interim, immediately enjoin sale of radar detector devices that cannot be shown by their manufacturer or importer to protect satellite operations in the 11.7-12.2 GHz band in accordance with the dictates of Section 15.5(b) of the Commission's rules.

- Require radar manufacturers to make a good faith effort at recall of such devices already sold or on the market, to reduce the population of such devices to the extent reasonably possible.

Such strong measures are entirely justified by the record in this proceeding. Anything less would result in a continuation of the serious and chronic interference currently suffered by authorized satellite operations due to unlicensed radar detectors that fail to comply with Part 15 of the Commission's rules.

Respectfully submitted,

Satellite Industry Association

By: 

Richard DalBello
Executive Director
225 Reinekers Lane, Suite 600
Alexandria, VA 22314